

ON RHOPALOCERA FROM MT. KOSCIUSKO, NEW SOUTH WALES.

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Our knowledge of the Rhopalocera of Mt. Kosciusko, the highest point of Australia, has hitherto been confined to the four species obtained by Mr. E. Meyrick in January, 1885, and recorded by him in September of the same year in an account of his journey, which, he tells us, was chiefly made in the interests of Entomology, and more especially in search of microlepidoptera.* Of the four species obtained by Mr. Meyrick two proved to be undescribed; the others were widely-distributed and abundant species.

To this meagre list I am now able to add fifteen species, three of which are new, from material collected by Mr. R. Helms during an excursion which he made on behalf of the Australian Museum in March and April of the present year. As far as Entomology is concerned this expedition was most successful, in spite of the fact that the collecting season was almost over, and Mr. Helms is to be congratulated upon the results of his undertaking. Like Mr. Meyrick, I was in hopes that some form of Satyridæ allied to *Erebia* would be found on Mt. Kosciusko, and I asked Mr. Helms, who is familiar with those found in the mountains of New Zealand, to do his utmost to ascertain if such a form exists, but his efforts met with no success.

1. PYRAMEIS CARDUI, Linn., var. KERSHAWI, McCoy.

Moonbar (3-3,500 feet), Mt. Kosciusko (5,000 feet); several very darkly coloured specimens.

2. PYRAMEIS ITEA, Fabr.

Moonbar (3-3,500 feet), Mt. Kosciusko (4,000 feet).

* An Ascent of Mount Kosciusko. Ent. Mo. Mag. xxii. pp. 78-82 (1885).

3. *JUNONIA VELLIDA*, Fabr.

Moonbar (3-3,500 feet), Mt. Kosciusko (5-6,000 feet).

4. *XENICA ACHANTA*, Don.

Moonbar (3-3,500 feet).

5. *XENICA KLUGII*, Guér.

Moonbar (3-3,500 feet), Mt. Kosciusko (5,000 feet).

6. *XENICA LATHONIELLA*, Westw.

Moonbar (3-3,500 feet), Jindabyne (3,000 feet), near Mt. Kosciusko, in March; common.

Perhaps a trifle darker than the typical form, but scarcely distinguishable from specimens obtained at Warra, on the Liverpool Plains.

7. *XENICA ORICHORA*, Meyr.

Mt. Kosciusko (5-6,000 feet), in March; abundant. Expanse, ♂ 32-35 mm.; ♀ 34-39 mm.

It is a singular fact that amongst some 150 or 160 specimens of the form which I conclude is the *X. orichora* only two individuals—a male and a female—are to be found which agree satisfactorily with Mr. Meyrick's description (Ent. Mo. Mag. 1885, p. 82), inasmuch as the hindwing is provided with an incurved ochreous-whitish marking extending from vein six along the inner margin of the ocellus to above the anal angle. In the two exceptions alluded to this marking is split up into five spots, thus answering to the "inwards-curved row of five ochreous-whitish silvery-tinged indistinct pale ochreous spots in a curved row between ocelli," whose presence is alluded to by Meyrick. In all other respects the fine series before me answers to the description of *X. orichora*. I am inclined to think from the fact that this form, and this form only, is abundant on the higher slopes of Mt. Kosciusko, that it is only a mountain race of *X. lathoniella*; but as the points in which it differs from the typical form (chiefly its darker colouring and its greater profusion of markings) appear to be constant, I think it may be

allowed the distinction of a name. In one or two specimens I have examined the ocellus of the forewing is duplicated.

8. *XENICA CORREÆ*, sp.n.

Wings above fuscous, with orange-fulvous markings, somewhat like those of *X. lathoniella*, but smaller and more irregular, and with similarly placed ocelli. Forewing with two large slightly oblique transverse spots within the cell, one about the middle, the other before the extremity, a similar and larger spot below the cell in the middle, a series of irregular spots (usually four) beyond cell, at $\frac{2}{3}$ from base, extending from costa to inner margin, of which the first is longitudinal, and the third broadly transverse; a conspicuous white-centred apical ocellus and a minute supplementary ocellus situated within an elongate marking, behind which is a small spot; a hind-marginal series of small spots. Hindwing with three small spots near base, an irregular series of spots extending from beyond costa to above anal angle, three spots extending upwards from anal ocellus, and a distinct hind-marginal series. Forewing beneath dull orange-fulvous, the fuscous markings almost obsolete, except near the costa; a series of whitish hind-marginal spots. Hindwing fuscous, with a black white-centred ocellus, surrounded by an ochreous ring near costa beyond middle, and a similar one above anal angle; four ochreous spots near base, first just beneath costa near base, second beneath first, third beyond second towards extremity of cell, fourth below second; an outwardly curved silvery band from middle of costa to above anal angle, interrupted at vein 5 and sometimes at vein 6; three rather large indistinct ochreous spots between ocelli; a hind-marginal series of elongate silvery spots, from which the dark hind-margin is divided first by a fuscous and then by an ochreous line. Expanse, ♂ 33-37 mm; ♀ 36-40 mm.

X. FULVA, var.nov. Underside dull orange-fulvous, marked with fuscous, the white and silvery markings of the typical form entirely absent, their size and position being indicated by indistinct fulvous markings; ocelli smaller and less conspicuous.

Mt. Kosciusko (5-6,000 feet) in March ; a considerable number were taken flying over a low-growing shrub, *Correa lawrenciana*, Hk., upon which Mr. Helms is convinced, and I think with reason, the larva of the butterfly will be found to feed.

This somewhat variable species is often without the minute extra white-centred ocellus in front of the ordinary ocellus of the forewing, and occasionally the band on the underside of the hindwing, which usually extends continuously from the costa to above the anal angle, is broken and slightly separated at vein five. It is evident that it is allied to *X. orichora* ; but the veins at the base of the hindwings are not marked with ochreous-whitish streaks as they are said to be in that species, nor is the inner margin ochreous-whitish. In these two points it also differs from *X. lathoniella*, and what is more it does not agree with either in having the spots at the base of the hindwings fulvous, or in the general disposition of the markings, particularly of those on the upperside of the forewings.

9. HETERONYMPHA PHILEROPE, Boisd.

Moonbar (3-3,500 feet), Mt. Kosciusko (5,000 feet).

Apparently this species has a wide range; it is found in North-West Australia, and throughout the Southern colonies, and recently I have seen specimens from Lord Howe Island.

10. HETERONYMPHA MEROPE, Fabr.

Jindabyne (3,000 feet).

11. HETERONYMPHA CORDACE, Hübn.

Moonbar (3-3,500 feet).

12. ZERITIS DISCIFERA, Herr.-Sch.

Moonbar (3-3,500 feet).

13. LAMPIDES ALSULUS, Herr.-Sch.

Jindabyne (3,000 feet), Moonbar (3-3,500 feet), Mt. Kosciusko (5,000 feet).

The specimens from the higher elevations are exceedingly small.

14. *LAMPIDES AGRICOLA*, Westw.

Mt. Kosciusko (5,500 feet).

15. *IALMENUS EVAGORAS*, Don.

Jindabyne (3,000 feet).

16. *BELENOIS TEUTONIA*, Fabr.

Mt. Kosciusko (5,500 feet).

17. *TELESTO DRACHMOPHORA*, Meyr.

Moonbar (3-3,500 feet); abundant.

A fine series of this species, which also occurs in Tasmania where it was captured both by Mr. G. Barnard and myself, was obtained by Mr. Helms. The silvery-white spots composing the discal band on the hindwings vary in size to a slight extent, but otherwise their peculiar markings appear to be fairly constant.

18. *HESPERILLA MUNIONGA*, sp.n.*

Thorax and abdomen dark fuscous brown, segmental margins of the latter whitish-ochreous. Head dark brown, spotted with ochreous; beneath whitish; palpi black, whitish beneath, except at the tips; antennæ black, spotted with yellow beneath. Forewing dark fuscous, some fulvous hairs near base, a whitish-ochreous oblique spot at end of cell, and three similar but smaller spots beyond middle, the first near costa at $\frac{2}{3}$ from base, divided into three parts by fuscous veins, the second behind first on disc, the third small, behind second, near inner margin $\frac{2}{3}$ from base, the three together forming an oblique series nearly parallel to the hind-margin. Hindwing dark fuscous, with an oblique transverse orange coloured band. Cilia of both wings whitish-ochreous, barred with fuscous. Forewing beneath fuscous, marked as above, except that the spot near costa is absorbed in a large ochreous apical marking which extends from costa at $\frac{2}{3}$ from base to just before middle of hind-margin; within this marking are three sub-apical, and a hind-marginal series of four small fuscous spots. Hindwing beneath ochreous, sometimes orange yellow, a dark fuscous spot at base, and three transverse series of elongate fuscous spots, the first before the middle, the second just behind

* Munyong is the native name of Mt. Kosciusko

the middle, the other hind-marginal. Expanse, ♂ 29-30 mm ; ♀ 33-35 mm.

Moonbar (3-3,500 feet), Mt. Kosciusko (5,000 feet); taken sparingly in March.

Allied to *Hesperilla ornata*, Leach, but the underside of the hindwings is very different, being more profusely marked with fuscous spots and quite differently coloured.

19. *HESPERILLA MONTICOLÆ*, sp.n.

♂. Head, thorax, and abdomen dark fuscous; palpi whitish, tipped with fuscous; antennæ black, annulated with whitish, beneath ochreous. Forewing dark fuscous, with three white spots, the first near costa at about $\frac{3}{4}$ from the base, divided into three parts by fuscous veins, the second just beyond middle at end of cell, the third at lower angle of cell, divided into two parts by fuscous vein. Hindwing with white spot on disc near middle, divided by fuscous vein. Cilia of both wings ochreous-white, barred with fuscous. Beneath both wings greyish fuscous, inclining to ochreous. Forewing with ochreous hairs near base, marked as above, whitish from apical angle to middle of hind-margin. Hindwing with broad longitudinal bars of whitish; one in the middle extending from base to hind-margin conspicuous, interrupted before extremity of cell where there is a fuscous spot, and again about midway between cell and hind-margin; an indistinct white bar near costa; a third near inner margin; both interrupted by an indistinct fuscous spot at about $\frac{2}{3}$ from base. Expanse 24-25 mm.

Moonbar (3-3,500 feet), in March; rare.

In the male, which is the only sex known to me, there is a conspicuous black sexual bar. The species is somewhat like *Hesperilla* (*Cyclopides*) *cynone*, Hew.,* in the disposition of its markings, but it is abundantly distinct, and as it does not appear to agree with any of the species described by Plötz, Mabille, and other writers who have recently turned their attention to the Hesperiidæ, I conclude it has not hitherto been characterised.

* Exot. Butt. V. p. 115, pl. 60, fig. 17 (1876).